

**NEW & EXISTING FRAMEWORKS
FOR INCREASING BALTIMORE'S
TREE CANOPY**

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Tree Action Plan Brochure,
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TREEBALTIMORE NEW FRAMEWORK RECOMMENDATIONS

Tree Resource

Understand the characteristics and needs of Baltimore's urban forest.

In order to develop sufficient programs for management, it is critical to understand the extent and limitations of the existing forest resources. Baltimore needs to develop and implement a plan to:

- Assess the current street tree resource of the City of Baltimore. Perform a complete street tree inventory.
- Integrate GIS-based tree management into Forestry Division operations.
- Conduct a tree and forest inventory on major parks and school sites that includes completion of Forest Management Plans.

Maintain the urban forest for maximum health and longevity.

Healthy trees live longer and provide more benefits at lower costs than trees that are under stress or sick.

- Strengthen regulations protecting trees.
- Strengthen policies and design guidelines for street tree plantings, maintenance and tree protection during construction.
- Assure the planting of a sufficient diversity of species.

Maximize the benefits of the urban forest.

Trees provide many different benefits including air quality, water quality, and quality of life. It is important to consider and quantify all of these benefits as plans and programs are developed and implemented.

- Create design guidelines for development and redevelopment projects that identify the use of trees for energy efficiency, traffic calming, commercial and streetscape improvements, etc.
- Increase the urban forest in areas that are shown to have a low amount of trees.
- Assure that the urban forest is distributed throughout Baltimore in all communities for equal benefits.
- Coordinate with water quality organizations and programs to assure that all benefits of trees for water quality are maximized.

Management Framework

Build communication and cooperation among departments to support the urban forest.

Many different agencies have responsibilities for the care and planting of trees. It is critical that each agency understands their role and that all agencies work together.

- Expand ongoing information exchange between the Departments of Transportation, Recreation and Parks and Planning to assure that protection and planting of trees are coordinated through the Capital Improvement Program process and project planning
- Identify and implement best practices for urban forestry management throughout City agencies.

Facilitate education and training programs for better decision-making in terms of design and construction.

Education and understanding of the needs and limitations of our tree resource are critical to the success of management of the urban forest.

- Incorporate up-to-date tree standards in all Baltimore City construction and reconstruction projects, with best practices for growing roadside trees and trees in highly developed areas while protecting infrastructure.
- Provide annual training to all City staff, including the forestry division, alleys and footways, sight plan review committee, and others.

Preserve and protect existing trees, and increase tree planting programs and opportunities.

Baltimore's urban forest has been shrinking. It will not be possible to meet our goals if existing trees and forests are not protected to the greatest extent practical.

- Reduce the presence of exotic and invasive plants throughout major forests.
- Follow best practices in sidewalk repair to maximize survival of trees and increase the number and size of tree wells.
- Adopt a Landscape Ordinance and Manual to guide tree planting in new development projects.

- Review and update the Forest Conservation ordinance.

Identify additional funding sources to support Baltimore's urban forest.

New and creative funding strategies are critical for success due to Baltimore's limited financial resources.

- Consider alternative funding to augment resources including private foundations, state and federal funding programs, bond bills, and development fees.

Community Framework

Educate and engage the public regarding the urban forest and its benefits.

Sustaining and increasing Baltimore's urban forest will require the assistance of all citizens.

- Create and implement a fundraising strategy.
- Establish a marketing campaign to raise awareness about the benefits of trees, their proper care, and the goals of TreeBaltimore.
- Modify the TreeBaltimore website to improve access to information.
- Implement a neighborhood liaison or train-the-trainer model to serve as point of contact at the neighborhood level; organize neighborhood tree committees.
- Revive the Notable Tree Tour and other Neighborhood Historic Tree Tours.
- Work with partners to develop and expand neighborhood-based community tree steward training programs.

Develop public-private partnerships for the support of the urban forest.

Partnerships are an excellent opportunity to combine resources, expertise and fundraising to support urban forest programs.

- Develop a TreeBaltimore Tree Trust, a public-private partnership that raises financial resources, attracts corporate sponsors, and markets TreeBaltimore.

Increase planting on private property.

The majority of trees in Baltimore must be planted on private property to meet our canopy goals.

- Develop a market-based incentive program to motivate members of the public to purchase and plant trees on private property.
- Provide small trees for free to citizens at special events.
- Develop TreeBaltimore acknowledgement and awards programs for tree planting on private property.
- Work with large institutional landholders regarding the health and care of their forested and landscaped areas.

EXISTING BALTIMORE FRAMEWORKS

Existing Management Framework

Department of Recreation & Parks

The Department of Recreation and Parks is the lead agency managing Baltimore's urban forest, devoting two sections of the Department to the issue.

The Forestry Division

The Forestry Division has the responsibility of maintaining street trees on 1,800 miles of roadway, as well as park trees on 6,000 acres of parkland. The major focus of work, however, is on the estimated 100,000 trees in city rights of way, including both streets and medians.

Trees on parkland are a minor focus due to the demand for planting and service on street rights of way. The major activities of the Forestry Division are planting, pruning, removing dead trees, and tree work caused by storms or wind. Tree work is scheduled on an as-needed and emergency basis as garnered from citizen service requests from the citywide one-call system, Cititrak. After a citizen calls 3-1-1, dispatchers forward requests to the Forestry Division. While progress is being made in addressing service requests in a timely fashion, there currently remains a substantial backlog on requests for pruning and stump removal.

Park Conservation Office

The Park Conservation Office (PCO) plants street trees and works to establish and maintain trees and forests in Baltimore City's parks through sustainable management plans and community involvement. The Park Conservation Office provides an understanding of the urban forest through education and training programs that foster community involvement in conservation and care of our forested parklands. The PCO has developed planting and maintenance standards for young trees and for established trees over 5 years old.

The Parks Conservation Office manages four programs:

1. **Community Forestry Program** – Provides environmental education and works with communities on greening initiatives.
2. **Forest Enhancement Program** – Creates and implements management plans for parks.
3. **Tree Steward Program** – Offers educational workshops for volunteers, and provides professional development training for Baltimore City staff and partner organizations.
4. **Urban Weed Warriors Program** – Offers training for citizens on the threat of invasive weeds and coordinates monthly, local volunteer weed pulls to encourage hands-on involvement in the community. Additionally, the Program distributes educational materials to nurseries and their customers about the negative effects of planting invasive species.

Department of Transportation

The Departments of Transportation, Recreation and Parks and Planning are working closely together to develop standards and policies for tree well size, location and species selection. DOT staff responsible for sidewalk repair, road construction and streetscaping are being trained on trees and their impacts.

Department of Public Works

The Bureau of Water and Waste Water maintains 3,400 miles of water mains and 3,100 miles of sanitary sewer mains. These mains sometimes need major repairs that can disturb significant numbers of trees. Currently, the Department of Public Works coordinates with the Department of Planning for tree maintenance efforts during construction, using the Forest Conservation Program as the legislative guide. In addition, where applicable, they coordinate with the Department of Recreation and Parks where sewer lines are located on park property.

Department of Planning

The Department of Planning provides services and leadership in urban and strategic planning, historical and architectural preservation, zoning, design, development, and capital budgeting. Currently, the department influences the urban forest through two major activities: development review and the capital improvement program.

The major regulatory tools for influencing the urban forest during the development review process are the

Forest Conservation Program and the Critical Area Management Program.

Forest Conservation

The Forest Conservation program is mandated by State regulation and is designed to preserve and enhance forests. In Baltimore City, the regulation is triggered by development with a disturbance of over 20,000 square feet.

To comply with Forest Conservation regulations, a project developer must retain a licensed, qualified professional to prepare Forest Stand Delineation, including an inventory of the existing natural resources on the site such as trees, forests, slopes and soils. This licensed, qualified professional also identifies priority preservation areas. The applicant then submits a forest conservation plan that proposes preservation of the priority areas. Depending on use, 15–20% of a site must be retained as forest, protected in perpetuity. Where no forest exists on-site, the developer is required to afforest the site to 15% of the size of the site. This can be completed in the form of landscaping.

Chesapeake Bay Critical Area Management Program (C.A.M.P.)

The C.A.M.P. is mandated by State regulation, and sets special environmental requirements on development within the Critical Area, defined as all land within 1000 feet of the Chesapeake Bay and that portion of tributaries to the Bay (such as the Gwynns Falls) that are influenced by tides.

The goals of C.A.M.P. are to protect and enhance habitat, to improve water quality by reducing pollutant runoff, and to make a more attractive urban environment. Water quality is a major focus of the Program.

Baltimore’s Critical Area is over 5,000 acres and has two types of “development areas”¹ which are subject to different guidelines and restrictions:

- Resource Conservation Areas (500 acres)
- Intensely Developed Areas (Almost entirely)

Environmental criteria for development vary by development area, and there are additional guidelines in other resource protection areas. Development allowed in Resource Conservation Areas is very restricted.

During development, all trees and vegetation must be preserved. If plants cannot be preserved, then planting must take place on the site based on specific criteria. If regulations prevent solutions on the site, the developer must compensate off-site or pay a fee. The fee amount depends on the location of the property. When there is no vegetation on site, developers must plant trees at a prescribed rate.

Other Initiatives

City-County Watershed Agreement – The Baltimore Watershed Agreement formalizes the commitment of Baltimore City and Baltimore County to work together on the management and monitoring of shared watersheds. First signed in 2002 and renewed in 2006, the agreement acknowledges that geographic boundaries of watersheds are more important than political boundaries for managing these important natural resources. Rivers and streams do not fall neatly within city and county boundaries. Many are shared by Baltimore County and Baltimore City. The headwaters of the Gwynns Falls and Jones Falls, for example, are in Baltimore County, but the streams flow to the harbor. Work is underway in the five focus areas identified in the 2006 Agreement:

- ▶ Stormwater
- ▶ Community Greening
- ▶ Redevelopment and Development
- ▶ Public Health
- ▶ Trash

The Committee of Principals has created a set of workgroups and is overseeing their efforts to develop goals and strategies. Making progress in each area will improve the quality of life for the citizens while also helping to meet water quality requirements as well as their obligations to improve regional rivers and the Bay.

Stormwater Management Act of 2007 – The Stormwater Management Act of 2007 focuses on the use of Environmental Site Design (ESD), a state-of-the-art water quality method, to manage stormwater.

The ESD approach is a comprehensive strategy for maintaining pre-development runoff characteristics and protecting natural resources by taking advantage of natural site features (e.g., soils), minimizing impervious cover (e.g., green roofs, porous pavement), and distributing runoff throughout the site.

The planning and design process is critical to ESD and requires identifying and assessing the quality of environmentally sensitive resources, such as trees, and their water quality functions. Integrating natural resource areas into a comprehensive drainage network for on-site and downstream systems will have to be addressed in the first phase of site design. In addition, evaluating the distribution of on-site impervious areas will focus on strategies to reduce overall stormwater volumes during development design.

The urban forest will play a key role in meeting the new stormwater management act requirements.

Mitigation Planting – The Baltimore City Department of Planning works with the Maryland Department of Natural Resources to oversee mitigation for State projects that trigger the Forest Conservation Law or are in the Critical Area. In 2008, 1,380 trees and 3,300 shrubs were planted as mitigation for the Forest Conservation and Critical Area programs. This included tree plantings for a State road project, plus mitigation by Coppin University and the Maryland Port Administration. Currently, mitigation is being planned for work related to Interstate 95. This could mean as many as 10,000 trees planted in Baltimore within the next four to five years.

Existing Community Framework

Baltimore is fortunate to have a growing network of citizen and non-profit stakeholder groups devoted to improving our urban forest. Below is a brief profile of the prominent groups engaged in this ongoing effort.

The Parks and People Foundation (PPF) is a non-profit organization established in 1984 to develop public-private partnerships focused on recreation, parks and environmental issues. PPF conducts training in tree planting and maintenance, performs neighborhood tree surveys, assists in the development of neighborhood greening plans, and provides on-site support and small grants for community-driven greening projects.

[www.parksandpeople.org]

The Jones Falls Watershed Association (JFWA) works to protect and restore the health and beauty of the Jones Falls watershed through restoration, monitoring, advocacy and citizen awareness. It is a volunteer-driven grassroots organization started in 1997 to protect and restore the Jones Falls and its tributaries. Volunteers for JFWA participate in trash cleanups, water quality monitoring, buffer plantings and outreach. Additionally, volunteers assist with outreach and work with large landowners in the watershed to improve land management practices to improve water quality. [www.jonesfalls.org]

The Herring Run Watershed Association (HRWA) mission is to improve the environmental and aesthetic quality of the Herring Run Watershed by conducting stewardship and education programs, and by

mobilizing volunteers for monitoring, restoration and advocacy. HRWA engages citizens in learning about environmental issues and taking personal action for the preservation and restoration of the watershed. They organize volunteer projects and workshops and have an established tree nursery and seasonal sales of native plants and trees, and opened the Herring Run Watershed Center, which is seeking LEED certification, at 3545 Belair Road.

[www.herringrun.org]

Baltimore Forestry Board – As a requirement of the State Roadside Tree Law, each local jurisdiction must establish and maintain a Forest Conservation District Board in partnership with the Maryland DNR, Forest Service. Each Forestry Board strives to promote citizen appreciation and concern for forests and trees. The mission of the Forest Conservancy District Board for Baltimore City is to promote stewardship, conservation, management and the wise use of Maryland's renewable forest resources, both rural and urban.

These organizations, as well as numerous citizen and community association volunteer efforts, provide a solid base upon which to build the long-term partnerships and infrastructure needed to increase private support for TreeBaltimore's goals.

For more information regarding TreeBaltimore and our efforts to increase the city's canopy,
visit **www.baltimorecity.gov/government/recnparks/treeBaltimore**

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This is a combined source list containing references used in both this document and the supplementary Tree Action Plan document.



**QUESTIONS ABOUT
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